## UNITED STATES PATENT AND TRADEMARK OFFICE

## **CERTIFICATE OF CORRECTION**

PATENT NO. : 7,007,020 B1 Page 1 of 2

APPLICATION NO.: 09/524140
DATED: February 28, 2006
INVENTOR(S): Qiming Chen et al.

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

In column 2, line 33, delete "arid" and insert -- and --, therefor.

In column 5, line 42, insert -- and -- before "feed".

In column 12, line 29, delete "X<sup>\*</sup>Y," and insert -- XΛY, --, therefor.

In column 12, line 32, delete " $0^{\circ}C_{v}$ " and insert --  $0\Lambda C_{v}$  --, therefor.

In column 12, line 41, delete " $C_{\alpha}$ " and insert --  $C_a$  --, therefor.

In column 12, line 46, delete "X" and insert -- XAY --, therefor.

In column 12, line 47, delete " $C_{\alpha}$ " and insert --  $C_a$  --, therefor.

In column 13, line 24, delete "NumOJBuyers" and insert -- NumOfBuyers --, therefor.

In column 13, lines 27-28, delete "customer roup" and insert -- customer group --, therefor.

In column 13, line 32, delete "NumOJShoppers" and insert -- NumOfShoppers --, therefor.

In column 13, line 33, delete "NumOJShoppers" and insert -- NumOfShoppers --, therefor.

In column 13, line 38, delete " $C_{\alpha}$ " and insert --  $C_a$  --, therefor.

In column 13, line 39, delete " $C_{\alpha}$ " and insert --  $C_a$  --, therefor.

In column 17, line 6, delete "pi" and insert --  $p_1$  --, therefor.

In column 17, line 11, delete "productpl, time t," and insert -- product  $p_1$ , time  $t_1$  --, therefor.

In column 17, line 27, delete " $\alpha$  month+1" and insert -- a month+1 --, therefor.

In column 17, line 31, delete "α year" and insert -- a year --, therefor.

In column 17, line 32, delete "\alpha Year" and insert -- a year --, therefor.

In column 18, line 62, delete " $C_{\alpha,i}$ " and insert --  $C_{a,i}$  --, therefor.

In column 19, line 13, delete " $\alpha_l$ ,...,  $\alpha_k$ " and insert --  $\alpha_l$ ,...,  $\alpha_k$ , --, therefor.

In column 19, line 13, delete " $\alpha$ " and insert -- a --, therefor.

In column 19, line 16, delete " $\alpha_l, \ldots, \alpha_k$ " and insert --  $\alpha_l, \ldots, \alpha_k$  --, therefor.

In column 20, line 26, in Claim 3, delete "th" and insert -- the --, therefor.

In column 21, line 15, in Claim 8, delete "multidimensional" and insert -- multi-dimensional --, therefor.

In column 21, line 27, in Claim 9, after "update" delete "F".

In column 22, line 5, in Claim 15, delete "products"" and insert -- "products" --, therefor.

In column 23, line 14, in Claim 23, delete "cubes," and insert -- cubes --, therefor.

In column 24, line 6, in Claim 26, delete "the" and insert -- a --, therefor.

Signed and Sealed this

Thirtieth Day of March, 2010

David J. Kappos

Director of the United States Patent and Trademark Office